Serial No.: 10/015,013

Filed: December 11, 2001

Page : 2 of 7

## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## **Listing of Claims**:

1. (Currently Amended) A spread spectrum receiver, comprising:

an antenna for receiving a spread spectrum signal;

a digital filter coupled to said antenna, wherein said digital filter outputs a first set of terms including linear predictive coefficients representing interfering periodic or quasi-periodic signals within a specified band containing said spread spectrum signal and said digital filter outputs a second set of terms including error coefficients that do not include said interfering periodic or quasi-periodic signals, wherein said linear predictive coefficients are discarded and said corresponding interfering periodic or quasi-periodic signals are filtered out, and wherein said error coefficients are used for signal processing to recover information in the received spread spectrum signal.

- 2. (Original) The spread spectrum receiver of Claim 1, wherein said digital filter comprises a linear predictive coding filter.
- 3. (Canceled).
- 4. (Original) The spread spectrum receiver of Claim 1, wherein said specified band corresponds to IEEE 802.11 (b).
- 5. (Original) The spread spectrum receiver of Claim 1, wherein said specified band corresponds to Bluetooth.

Serial No.: 10/015,013

Filed: December 11, 2001

Page : 3 of 7

6. (Currently Amended) The spread spectrum receiver of Claim 1 further comprising a

modulated CDMA receiver.

7. (Previously Presented) The spread spectrum receiver of Claim 1 further comprising an

analog-to-digital converter which converts said spread spectrum signal received by said antenna

into a digital signal which is inputted directly into said digital filter.

8. (Canceled).

9. Canceled).

10. (Original) The spread spectrum receiver of Claim 2, wherein said linear predictive coding

filter outputs a prediction error which is used for signal processing purposes.

11. (Currently Amended) A linear predictive coding filter for filtering out periodic or quasi-

periodic signals in a spread spectrum system comprising:

a linear predictive coding gradient adaptive lattice that filters out periodic or

quasiperiodic signals corresponding to predictive coefficients and said linear predictive coding

filter outputs error information which is then used for signal processing purposes to recover an

information signal.

12. (Canceled).

13. (Original) The linear predictive coding filter of Claim 11, wherein said spread spectrum

system comprises a direct sequence spread spectrum system.

14. (Original) The linear predictive coding filter of Claim 11, wherein said spread spectrum

system comprises a frequency hopping spread spectrum system.

15. (Canceled)

Serial No.: 10/015,013

Filed: December 11, 2001

Page : 4 of 7

16. (Original) The linear predictive coding filter of Claim 11, wherein said filter is used to filter out said periodic or quasi-periodic signals in compliance with IEEE 802.11 (b).

- 17. (Original) The linear predictive coding filter of Claim 11, wherein said filter is used to filter out said periodic or quasi-periodic signals in compliance with Bluetooth.
- 18. (Currently Amended) The linear predictive coding filter of Claim 11, wherein said filter is used to filter out said periodic or quasi-periodic signals in a standard modulated CDMA system.
- 19. (Original) The linear predictive coding filter of Claim 11, wherein said filter is used in a wireless peer-to-peer system.
- 20. (Previously Presented) A method for filtering periodic or quasi-periodic signals in a spread spectrum signal, comprising:

receiving said spread spectrum signal;

digitizing said spread spectrum signal;

determining linear predictive coefficients corresponding to said spread spectrum signal; discarding said linear predictive coefficients, wherein the linear predictive coefficients are not used to actively filter said spread spectrum signal;

determining error coefficients corresponding to said spread spectrum signal; processing said error coefficients to retrieve information contained in the spread spectrum signal.

- 21. (Original) The method of Claim 20, wherein a linear predictive coding filter is used to determine said linear predictive coefficients and said error coefficients.
- 22. (Canceled)

Serial No.: 10/015,013

Filed: December 11, 2001

Page : 5 of 7

23. (Original) The method of Claim 20 further comprising the step of filtering said periodic or quasi-periodic signals in accordance with IEEE 802.11(b).

- 24. (Original) The method of Claim 20 further comprising the step of filtering said periodic or quasi-periodic signals in accordance with Bluetooth.
- 25. (Currently Amended) The method of Claim 20, wherein said spread spectrum signal comprises a modulated CDMA signal.

26-29. (Canceled).

30. (Currently Amended) A method for filtering periodic or quasi-periodic signals in a spread spectrum signal, comprising:

receiving said spread spectrum signal;

digitizing said spread spectrum signal;

using a linear predictive coding filter <u>having a gradient adaptive lattice structure</u> to determine linear predictive coefficients and error coefficients corresponding to said spread spectrum signal;

performing a gradient adaptive lattice method to determine said linear predictive coefficients and said error coefficients;

discarding said linear predictive coefficients;

using said error coefficients in signal processing to recover information in the said spread spectrum signal.

31. (New) A method for filtering periodic or quasi-periodic signals in a spread spectrum signal, comprising:

receiving a spread spectrum signal;

digitizing the received spread spectrum signal;

determining, using a linear predictive coding filter, linear predictive coefficients and error coefficients corresponding to the digitized spread spectrum signal; and

Serial No.: 10/015,013

Filed: December 11, 2001

Page : 6 of 7

processing the received spread spectrum signal using the determined error coefficients, but not the determined linear predictive coefficients, to recover information contained in the received spread spectrum signal.